

Remarks

Upon entry of the foregoing amendment, claims 1 and 49-64 are pending in the application, with claims 1, 49, and 52 being the independent claims. No claim amendments are sought. The specification is sought to be amended to update the continuity information for the application and to correct a minor typographical error. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Examiner-Requested Documents

On page 2, paragraph 2, of the Office Action, the Examiner requested that Applicants provide copies of pages 1 and 2 of the document list submitted with the Information Disclosure Statement filed on May 22, 2002. The Examiner stated that pages 1 and 2 were missing from the file record. To comply with the Examiner's request, Applicants have submitted requested pages 1 and 2 herewith.

Rejection Under 35 U.S.C. § 101

The Office Action states on page 2, paragraph 3, that claim 49 is rejected under 35 U.S.C. § 101, stating that the claimed invention is directed to non-statutory subject matter. Applicants disagree and respectfully traverse this rejection.

The method steps all include use of "registers," which tie the claim to a technological art, environment or machine. In the writing step of claim 49, a third register is written to "in

a particular order to produce a target vector having a plurality of elements aligned for SIMD processing." Applicants submit that the claimed process of using the first, second, and third registers ties the claimed method to a technological art, environment, or machine. Also, writing a combined plurality of elements to the third register "in a particular order to produce a target vector having a plurality of elements aligned for SIMD processing" is a concrete (i.e., repeatable), useful (for SIMD processing, for example), and tangible (i.e., real-world) result with practical applicability (i.e., a register containing an aligned data element (a target vector) ready for SIMD processing). The claimed method is a practical application useful for SIMD processing.

The new "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" recently published by the USPTO (see http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf) states that an invention falls within the scope of 35 U.S.C. 101 "if the claimed invention physically transforms an article or physical object to a different state or thing, or if the claimed invention otherwise produces a useful, concrete, and tangible result." (See page 2 of the guidelines, lines 1-4.) In claim 49, the claimed process manipulates the first and second source vectors using registers and provides a register that contains an aligned data element (i.e., a target vector) ready for SIMD processing. The third register can be thought of as being transformed to contain data ready for SIMD processing, falling within the scope of 35 U.S.C. § 101. Even if this "transforming" test is found to be erroneous, the claimed method still provides a "useful, concrete, and tangible result" as discussed above, falling within the scope of 35 U.S.C. § 101.

The Office Action states in paragraph 4 that "the source vectors are non-functional descriptive material" and that "[m]erely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory." Applicants note that the claimed process does not merely claim nonfunctional descriptive material stored in a computer-readable medium. The claimed process shows the loading into, reading from, and writing to registers to manipulate the data into a format practical and useful for SIMD processing. Assuming, *arguendo*, some aspect of the claim is nonfunctional (a position Applicants do not concede), the new guidelines state that "[n]onfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. § 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter." (See page 54 of the guidelines, lines 16-20.) Applicants believe that the necessary functional and structural interrelationship is present in claim 49 as claimed.

For at least the reasons stated above, Applicants believe claim 49 satisfies the requirements of 35 U.S.C. § 101 and is therefore an allowable claim. Claims 50 and 51 depend from claim 49 and are believed to be allowable for at least the reasons claim 49 is allowable, in addition to the additional features cited therein. Thus, Applicants respectfully request that this rejection of claim 49, as well as the objection to claims 50 and 51, be reconsidered and withdrawn.

Nonstatutory Double Patenting Rejections

The Office Action states on pages 3-6 that claims 1, 52-53, and 59-64 are rejected under the judicially created doctrine of obviousness-type double patenting over various claims of U.S. Pat. No. 6,266,758 B1 and/or U.S. Pat. No. 5,933,650. Applicants filed a Terminal Disclaimer on January 24, 2002, with regard to both U.S. Pat. No. 6,266,758 B1 and U.S. Pat. No. 5,933,650. Since this rejection was previously overcome, Applicants respectfully request that the nonstatutory double patenting rejections of claims 1, 52-53, and 59-64 be reconsidered and withdrawn.

Rejections Under 35 U.S.C. § 103

The Office Action states on page 6 (paragraph 8) that claims 1, 49, and 52 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Pat. No. 5,887,183 to Agarwal *et al.* (hereinafter "Agarwal") in view of U.S. Pat. No. 5,922,066 to Cho *et al.* (hereinafter "Cho"). This rejection of claims 1, 49, and 52 as presented by the Examiner in the current Office Action is nearly identical to the rejection of these same claims in the Office Action mailed on August 24, 2001. Subsequent to receiving the Office Action of August 24, 2001, an Examiner Interview was held (on January 10, 2002) to discuss the differences between Agarwal and the claimed invention (then-pending claims 1 and 49-53). In that Examiner Interview, the Examiner acknowledged the differences. In the Amendment and Reply filed on January 24, 2002, Applicants responded to the rejection. The Examiner subsequently allowed the pending claims (claims 1 and 49-53).

In order to avoid being repetitive, Applicants respectfully request that the Examiner refer to pages 5-11 of the Amendment and Reply filed January 24, 2002, which is

incorporated herein by reference, and which provides a full and complete reply to the current rejection of the same claims. As discussed in the Amendment and Reply filed January 24, 2002, neither Agarwal nor Cho (alone or in combination) teaches or suggests the claimed features of claims 1, 49, and 52. Accordingly, claims 1, 49, and 52, along with the claims that depend therefrom (claims 50-51 and 53-64), are patentable over the combination of Agarwal and Cho. Therefore, Applicants respectfully request that this rejection of claims 1, 49, and 52, be reconsidered and withdrawn.

Claims 54-58

Applicants have noted that the current Office Action shows claims 54-58 being rejected on the Office Action Summary, but does not formally address these claims in the Office Action. Because claims 54-58 depend, either directly or indirectly, from claim 1, Applicants believe claims 54-58 to be allowable for at least the reasons claim 1 is allowable, as discussed above, in addition to the additional features cited therein. Therefore, Applicants respectfully request that claims 54-58 be considered and passed to allowance.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite

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prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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